United States Coast Guard



ALTERNATE COMPLIANCE PROGRAM TANKSHIP (OIL) EXAMINATION BOOK

Name of Vessel	
Official Number	ACP Class Society
Date Completed	Location
Vessel Built in Compliance with	SOLAS: 60 74 74/78 N/A
Exam Type	
Annual Reexa	amination
Inspectors	
1	3
2	4

CG-840 ACP TS(Oil) Rev. 1/99

Total Time Spent Per Activity:

Regular Personnel (Active Duty)			
ACTIVITY	TRAINING	(PERS) MI	

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS

Reserve Personnel				
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI	

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS

Auxiliary Resources			
TOTAL BOAT HOURS	TOTAL AIRCRAFT HOURS		

Use of ACP Tankship (Oil) Examination Book:

This examination book is intended to be used as a job aid by Coast Guard marine inspectors during annual examinations and reexaminations of U.S. flagged vessels participating in the Alternate Compliance Program (ACP). This book contains an extensive list of possible examination items. It is not, however, the Coast Guard's intention to "inspect" all items listed. The marine inspector must verify that the vessel and its crew are in substantial compliance with international conventions and the requirements of the ACP class society's U.S. Supplement. The depth and scope of the examination must be determined by the marine inspector's observation of the vessel, its equipment, and its crew.

This document does not establish or change Federal laws or regulations. References given are only general guides. Refer to IMO publications, CFR's, the ACP class society's U.S. Supplement, NVIC's, or any locally produced cite guides for specific regulatory references. Although not all items in this book are applicable to all vessels, Section 1 should be filled out in its entirety at each examination and reexamination.

NOTE: Guidance on how to examine ACP vessels can be found in MSM Volume II, Chapter 32: Alternate Compliance Program, and NVIC 2-95, Change 1. All MSM cites listed in this book refer to MSM Volume II unless otherwise indicated.

Guide to Examinations:

	Annual examination and reexamination
\Diamond	Annual examination only
0	Expanded examination as required

These three stages are only a general guide. Each marine inspector should determine the depth of the examination necessary. A checked box should be a running record of what has been examined by the marine inspector. It does not imply that the entire system has been examined or that all or any items are in full compliance.

NOTE: A reexamination normally includes an examination of the vessel's documents, certificates, and licenses, in addition to a "walk-through" of the vessel.

Pre-inspection Items

- Review vessel computer (survey status) reports from the ACP class society.
- Review reports pertaining to conditions of class or statutory deficiencies
- Obtain copies of forms or certificates to be issued.

Post-inspection Items

- Issue forms/certificates to vessel.
- Update MSIS with international certificate data.
 - VFOD MSDS
 - VFLD MIDR
 - MIAR
- Initiate Report of Violation (ROV) if necessary

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Section 1: Administrative Items

IMO Applicability Dates:

Reference	Date
SOLAS 1960	26 MAY 65
SOLAS 1974	25 MAY 80
1978 Protocol to SOLAS 1974 1981 Amendments (II-1 & II-2) 1983 Amendments (III) Various additional amendments to SOLAS	01 MAY 81 01 SEP 84 01 JUL 86
MARPOL 73/78 Annex I	02 OCT 83
MARPOL 73/78 Annex II	06 APR 87
MARPOL 73/78 Annex III	01 JUL 92
MARPOL 73/78 Annex V	31 DEC 88
IBC Code	After 01 JUL 86
BCH Code	Prior to 01 JUL 86
COLREGS 1972 Various additional amendments to COLREGS	15 JUL 77
Load Line 1966	21 JUL 68
STCW 1978	28 APR 84
1991 Amendments 1994 Amendments 1995 Amendments	01 DEC 92 01 JAN 96 01 FEB 97

Involved Parties & General Information:

Vessel's Representatives	
Phone Numbers	
Owner—Listed on DOC or COFR	
No Change	
Operator	
No Change	

Vessel Information:

Classification Society				
ISM Issuer: Same as above?				
Yes No If not the same, which Recognized Organization?				
NOTE: The period of validity for ISM docum If they do NOT, ISM documents should be for			ing list.	
□ 5 years = Full term (SMS and DOC)		12 months = Interim (DOC))	
□ 6 months = Interim (SMC)		5 months = Short term (SM	1C)	
Date of Last Class Survey				
Outstanding conditions of class	or no	n-conformities		
Last Port of Call	Next Port of Call			
Cargo	Current Operations			
Does vessel meet double-hull requirements?				
Yes No If not, vessel must meet requirements by (date) in accordance with 33 CFR Part 157 Appendix G.				
Last Three Cargoes				
1				
2				
3.				
Is pumproom gas-free?	Yes	No	N/A	

Call Sign	No Change (VFID)
Gross Tons	No Change (VFMD)
Built Date (use delivery date)	No Change (VFCD)
Overall Length (in feet)	No Change (VFMD)

Vessel Description:

Crude Carrier Oil / Bulk / Ore

Product Carrier Other

Combination _____

Section 2: Certificates and Documents

International Certificates:

Name of Certificate	Issuing Agency	ID#	Port Issued/ Country	Issue Date	Exp. Date	Endors. Date
Certificate of Documentation No Change	USCG					
Classification Document						
No Change						
Certificate of Financial Responsibility (COFR)	USCG					
No Change						
Safety Construction (SLC)						
No Change						
Safety Equipment (SLE)						
No Change						
Safety Radio (SLT)						
No Change						

Name of Certificates	Issuing Agency	ID#	Port Issued/ Country	Issue Date	Exp. Date	Endors. Date
International Load Line (ILL)						
No Change						
International Oil Pollution Prevention w/Form B (IOPP)						
No Change						
International Tonnage (ITC)						
No Change						
Safety Management (SMC)						
No Change						
Document of Compliance (DOC)						
No Change						

<u>Mar</u>	nning:	
	Officers' licenses current	STCW 95 I/2 STCW 95 I/10 STCW 95 VI/1 STCW 95 VI/2
	Rest periods	STCW 95 VIII/1
	Review watch schedules	
<u>Log</u>	s and Manuals:	
	 Lifesaving equipment maintenance record Periodic checks as required Visual inspection of survival craft / rescue boat and launching appliances Operation of lifeboat / rescue boat engines Lifesaving appliances, including lifeboat equipment examined 	SOLAS 74/78 III/19
	 Emergency training and drills Onboard training in use of lifesaving equipment (all crew members) SOLAS training manual Logbook records 	SOLAS 74/78 III/18
	Weekly and lifeboat drills	SOLAS 74/78 III/18.5 SOLAS 74/78 III/25
	Bridge log	STCW 95 I/14
	 Pre-arrival tests conducted Casualties (navigation equipment and steering gear failures reported) Steering gear drills Emergency steering drills 	33 CFR 164.25 33 CFR 164.53
	Exemptions to SOLAS certificates	SOLAS 74/78 I/4
	Cargo and ballast information manual	33 CFR 157.23
Note	s:	

Pollution Prevention Records: Current pollution prevention records Person-in-charge 33 CFR 155.700 Transfer equipment tests and inspections 33 CFR 156.170 Declaration of Inspection 33 CFR 156.150 Proper endorsements for cargo carried IF vessel carries: THEN it must have: NLS cargo An endorsement on TVE, AND MARPOL Ax. II **NVIC 5-87** A list of authorized cargoes on **TVE** Category D cargo • An NLS certificate, OR 33 CFR 157.35(c) An endorsement on TVE Category C oil-like An attachment to IOPP 33 CFR 157.33 cargo certificate, OR An endorsement on TVE Category D oil-like An attachment to IOPP 33 CFR 157.35(d) cargo certificate, OR An NLS certificate, OR An endorsement on TVE Crude oil washing system Required documents 33 CFR 157.118 Waiver 33 CFR 157.120 Dedicated clean ballast tanks Plans and documents 33 CFR 157.202 Operations manual 33 CFR 157.208 Required documents 33 CFR 157.216 IOPP certificate items 33 CFR 157.15 Number of slop tanks Total capacity of slop tanks_ 33 CFR 157.17 Oily residue tank Notes:

\Diamond	 Oil record book (spot-check) Each operation signed by person-in-charge Each complete page signed by master Book maintained for 3 years 	MARPOL Ax. I/20 33 CFR 151.25
\Diamond	 Shipboard oil pollution emergency plan Approved by flag state / class society Contact numbers correct Immediate Actions List 	MARPOL Ax. I/26.1 33 CFR 151.26
\Diamond	 Vessel response plan Approved by Coast Guard Annual review by owner / operator 	33 CFR 155.1030 33 CFR 155.1035 33 CFR 155.1065 33 CFR 155.1070
\Diamond	 Oil transfer procedures Posted / available in crew's language List of products carried by vessel Description of transfer system including a line diagram of piping Number of persons required on duty Duties by title of each person Means of communication Procedures to top off tanks Procedures to report oil discharges 	33 CFR 155.720

Notes:				

Section 3: General Examination Items

Naν	<u>/igation Safety:</u>		
	Charts and publications for US waters/intended voyage	33 CFR 164.33	
	 Current and corrected charts US Coast Pilot Sailing directions Coast Guard Light List Tide tables Tidal current tables International Rules of the Road Inland Rules of the Road International Code of Signals Plotting equipment 	33 CFR 164.35	
ш	Radar(s) and ARPA	33 CFR 164.35 33 CFR 164.37	
	2 required if over 10,000 GTOperate independentlyARPA acquires targets	33 CFR 164.38	
	Compasses	33 CFR 164.35	
	 Illuminated gyrocompass with repeater at stand Illuminated magnetic compass Current deviation table 		
	Test electronic depth sounding device and recorder	33 CFR 164.35	
	Accurate readoutTest all transducersContinuous recorder (chart)		
	Electronic position fixing device	33 CFR 164.41	
	Location accurate		
Note	98:		

Ш	Indicators	33 CFR 164.35
	 Illuminated rudder angle indicator Centerline RPM indicator Propeller pitch (CPP systems) Speed and distance indicators Lateral thrusters 	33 CFR 164.40
	Communications	SOLAS 74/78 IV/6.3
	VHF radio	33 CFR 26.03
	Steering gear instructions	33 CFR 164.35
	InstructionsEmergency instructionsBlock diagram	
	Maneuvering facts sheet with warning statement	33 CFR 164.35
	Radiotelephone (VHF-FM)	SOLAS 74/78 IV/7 33 CFR 26.03 33 CFR 26.04
	EPIRB (406 MHz)	SOLAS 74/78 IV/7.1.6
	Float-free amountBattery date currentHydrostatic release	
	GMDSS	SOLAS 74/78 IV/8
	Additional radio equipment for area of operation	SOLAS 74/78 IV/9 SOLAS 74/78 IV/10 SOLAS 74/78 IV/11
\Diamond	Operationally test bridge steering	SOLAS 74/78 II/1-29
	 Test power/control pumps independently Test follow-up and non-follow-up controls Rudder angle indicator accurate Activate loss of power alarm 	
\Diamond	GMDSS lifeboat radios (VHF)	SOLAS 74/78 III/6.2
	 3 if over 500 GT Operable condition	
Note	98:	

\Diamond	9 GHz radar transponder (SART)	SOLAS 74/78 III/6.2
	Vessels > 300 GT and < 500 require 1	NVIC 9-93
	• Vessels > 500 GT require 2	
	 Stowed so to be rapidly placed in survival craft, or stowed in survival craft 	
\Diamond	NAVTEX	SOLAS 74/78 IV/7.1.4
\Diamond	Radio installation	SOLAS 74/78 IV/6.2
	Marked with call sign	
<u>Ger</u>	neral Health and Safety	
	Accident Prevention and Occupational Health	
	 Rails, guards, protective clothing and equipment, warning signs posted in crew work areas 	
	Crew accommodations	46 CFR 32.40
	Habitable conditions Adagraph lighting and contiletion	MSM Ch. 13.C
	Adequate lighting and ventilationFree of cargo and stores	
	Individual berths	
	Hospital space	46 CFR 32.40
	 Designated for ships ≥ 500 GT with 15 or more crew on voyage of more than 3 days 	MSM Ch. 13.C
	Not used for stowage or berthing	
	Properly operating toilet	
	Galley	MSM Ch. 6.P.8
	Sanitary conditions	MSM Ch. 13.C
	Adequately equipped to prepare foodMess hall provided for crew	
	Muster lists and emergency instructions	
	Available for each person	SOLAS 74/78 III/8
	 Posted in conspicuous places 	001.40.74/70.111/50
	Shows crew member duties	SOLAS 74/78 III/53
Note	S:	

	Safe access to tanker bows (vessels built prior to 1 JUL 98 not required to comply until 1 JUL 2001)	SOLAS 74/78 II-1/3-3
Stru	uctural Integrity	
deper vasta	E: Request records of Outstanding Conditions of Class. (For ading on classification society.) Conditions of Class may iden- age, etc. Conditions may also identify ships overdue for drydo aed service.	ntify structural defects,
	Hull structure	ICLL 66 Reg. 1
	 Frame pulling away Fractures in corners Holes in main decks Leaks / patching on ballast tanks Bulkheads / decks warped Excessive wastage 	
	Side shell, accessible structural members, decks, and superstructure	ICLL 66 Reg. 1
	 Fractures, corrosion, wastage, pitting or damage to the extent that it may impair ship's seaworthiness Excessive doublers, postage stamp inserts, cement boxes or soft patches Welding burn marks or other evidence of recent repair work 	
	 Load line marked in accordance with certificates Hailing port Name Railings 	ICLL 66 Regs. 4 - 9
	Watertight/weathertight openings	
	Watertight doors, gaskets, dogsOther openings (means of securing)Vents, air pipes and closing appliances	ICLL 66 Reg. 12 ICLL 66 Regs. 13 - 18 ICLL 66 Regs. 19 & 20
	Mid-body ballast tank externally examined	MSM Vol. II Ch. 21
<u>Gro</u>	und Tackle:	
	Emergency towing arrangements (vessels ≥ 20,000 DWT only)	SOLAS 74/78 II-1/3-4
	Approved by Administration	
Vote	s:	

	 Drive units Guards Covers for moving parts Brake pads Deck fittings Electrical (wiring) or hydraulic piping 	
\Diamond	Mooring winches / capstans Foundations Cables / hooks Boom Brake Electrical (wiring) or hydraulic piping Ladders / rails	
Car	go Operations:	
	Pumprooms NOTE: If pumproom is not gas-free, issue requirement to make it available at next U.S. port.	MSM Vol. I Ch.10 Appendix A MSM Vol. II Ch. 5.I
	 Marine Chemist Certificate Chemist No. Certificate No. Date issued Ventilation Electrical installation Fire extinguishing system Potential sources of ignition (gear adrift, product in bilges, rags, paint, cleaning solvents, vapors, etc.) 	SOLAS 74/78 II-2/59.3 SOLAS 74/78 II-2/63
	 External examination of inert gas system Piping and components Scrubber 	46 CFR 32.53 MSM Vol. II Ch. 15
	 Fans Valves Expansion joints Free of corrosion or leakage 	
Note	PS:	

Anchor and windlass (spot-check)

Foundations

	Piping systems							
	ConnectionsEquipment tests a	and inspections	33 CFR 1					
	• •	piping hydrostatic test	33 CFR 1	56.170				
	Bulk hazardous so	lids operations						
	Stowage conditionSpecial additionalAdditional require		46 CFR 1 46 CFR 1 46 CFR 1	48.04				
	Vapor control syste		56.120(aa) 9.10-13(d)					
	Pumping, piping, a	ngement 33 CFR 1	57.11					
	Designated observ	33 CFR 1	57.13					
	Cargo tank ventilat	SOLAS 7	SOLAS 74/78 II-2/59.1					
Life	saving Equipme	ent:						
	Lifeboats / rescue							
	Required number			4/78 III/26				
	 Hull integrity and 	J	SOLAS 7	4/78 III/19.2				
	 Engine starts with Test engine at NOTE: Do No 		t enaine.					
	Stbd Lifeboat	Port Lifeboat	Lifeboats					
	Engine equipped	Engine equipped	Wooden					
	Engine tested	Engine tested	Fiberglass					
	Lifeboat lowered	Lifeboat lowered	Steel					
			Covered					

Notes:			

Free fall lifeboat with rescue boat

	Davit system	SOLAS 74/78 III/19.2
	 Structure and foundation Roller tracks Lubrication (evidence of use) Falls; end for end / renew (2.5 / 5 years) 	SOLAS 74/78 III/48
	No obstructions to loweringEmbarkation areaNo obstructions	SOLAS 74/78 III/11.7
	Embarkation ladderLaunching instructionsEmergency lighting	SOLAS 74/78 III/9
	 Required number Stowage Float-free arrangement Hydrostatic release / weak link 	SOLAS 74/78 III/19 SOLAS 74/78 III/26 SOLAS 74/78 III/29
	 Annual servicing (hydrostatic release and inflatable liferaft) Maximum 17 months 	SOLAS 74/78 III/19.8.1 SOLAS 74/78 III/19.9.1
	 Launching instructions posted Bow / stern station Lashed down on deck or in marked location Lifejackets available 	SOLAS 74/78 III/9
	Lifebuoys (spot-check)	
	 Condition Bridge location Quick release system Smoke and light float Deck location 50% with waterlights 	SOLAS 74/78 III/19.2 SOLAS 74/78 III/7.1
	Retro-reflective tape	SOLAS 74/78 III/30.2.7
	Lifejackets—watchstanders and crew (spot-check)	
	 Condition Stowage Retro-reflective material Lights Whistles 	SOLAS 74/78 III/19.2 SOLAS 74/78 III/7.2.2 SOLAS 74/78 III/30.2.7 SOLAS 74/78 III/27.2 SOLAS 74/78 III/32.1.6
Note		30LA3 74/10 III/32.1.0

	Line-throwing appliances (spot-check)	SOLAS 74/78 III/17
	• 4 charges	
	Pyrotechnics (spot-check)	SOLAS 74/78 III/6.3
_	• 12 distress flares	
	Immersion suits and thermal protective aids (spot-check)	SOLAS 74/78 III/27.3
	ConditionRetro-reflective material	SOLAS 74/78 III/19.2 SOLAS 74/78 III/30.2.7
<u>Fire</u>	Protection:	
	Fire control plan	SOLAS 74/78 II-2/20
	Permanently exhibited	
	 Language of flag state 	
	 Copy permanently stored in weathertight container outside deckhouse 	
	Portable fire extinguishers (spot-check)	
	Good condition / available for immediate useLocated on stations	SOLAS 74/78 II-2/21
	Serviced at periodic intervals	SOLAS 74/78 II-2/6.5
	International shore connection	SOLAS 74/78 II-2/19
	Means of escape from accommodation, machinery, and other spaces	SOLAS 74/78 II-2/45
	Two required (some exceptions)Dead end corridors	
	Fire doors (spot-check)	SOLAS 74/78 II-2/46
	 Machinery space and stair towers 	SOLAS 74/78 II-2/47
	Not tied or blocked openInstalled closure devices working	
	Fire detection systems (spot-check)	
	Smoke / fire alarms	SOLAS 74/78 II-2/13
	Remote pull stations	SOLAS 74/78 II-2/11.8
Niata	Smoke / flame / heat detectors and sensors	SOLAS 74/78 II-2/53
Note	98:	

Required nu	mber of fire pumps			SOLAS 74/78 II-2/3 SOLAS 74/78 II-2/4
 Pumps, hydrants, piping, hoses, and nozzles in good condition and available for immediate use 				SOLAS 74/78 II-2/21
Structural fire	protection (spo	ot-check)		SOLAS 74/78 II-2/42
InsulationVentilation				
			Ο,	SOLAS 74/78 II-2/21
release mec	hanisms in good c			
Type of sys	tem: (circle appr	opriate type)		
Low Pressure CO ₂	High Pressure CO ₂	Halon	Foam	
ution Preve	ntion: (spot-	-check a	t reexa	minations)
Pollution place	ard posted			33 CFR 155.450
Pollution place	•			,
MARPOL V pl Garbage Shipboard g Incinerator Evidence Safety	acard posted arbage properly di ce of use (clinkers) of burner assembly)		33 CFR 155.450 33 CFR 151.59
MARPOL V pl Garbage Shipboard g Incinerator Evident Safety Electric	acard posted arbage properly di)		33 CFR 155.450 33 CFR 151.59 MARPOL Ax. V/9
	 Required nu Location of p Pumps, hydrogood conditi Structural fire Bulkheads Insulation Ventilation Penetrations Fixed fire extinmachinery, and Tanks, cylindrelease medavailable for Type of system Low Pressure CO2 	 Required number of fire pumps Location of pumps Pumps, hydrants, piping, hose good condition and available for Structural fire protection (spot Bulkheads Insulation Ventilation Penetrations Fixed fire extinguishing systemachinery, and other spaces Tanks, cylinders, piping, controverelease mechanisms in good cavailable for immediate use Type of system: (circle approximately pressure CO2 	 Pumps, hydrants, piping, hoses, and nozzl good condition and available for immediate Structural fire protection (spot-check) Bulkheads Insulation Ventilation Penetrations Fixed fire extinguishing systems: cargo machinery, and other spaces Tanks, cylinders, piping, controls, alarms, a release mechanisms in good condition and available for immediate use Type of system: (circle appropriate type) Low Pressure High Pressure 	 Required number of fire pumps Location of pumps Pumps, hydrants, piping, hoses, and nozzles in good condition and available for immediate use Structural fire protection (spot-check) Bulkheads Insulation Ventilation Penetrations Fixed fire extinguishing systems: cargo, machinery, and other spaces Tanks, cylinders, piping, controls, alarms, and release mechanisms in good condition and available for immediate use Type of system: (circle appropriate type) Low Pressure CO₂ High Pressure CO₂ Halon Foam

	Oil and hazmat			
	 Fuel oil and bulk lubricating oil discharge containment 	33 CFR 155.320		
	Prohibited oil spaces	33 CFR 155.470		
	Oily-water separating equipment, bilge alarm, and bilge monitor	MARPOL Ax. I/16 33 CFR 155.380		
	 Alarm, recorder Standard Discharge Connection Coast Guard approval number 162.050, or meets IMO Resolution A.393(X) 	33 CFR 155.430		
	Cargo monitor and control	MARPOL Ax.I/16		
	 Operation (automatic and manual) Means to stop discharge Indicators Recording devices 	33 CFR 157.12		
П	Marine sanitation device			
	 Type (I, II, or III) Nameplate Placard 	33 CFR 159.7 33 CFR 159.55 33 CFR 159.59		
Mad	chinery Spaces:			
П				
ш	Main and auxiliary machinery installations General housekeeping	SOLAS 74/78 I/11(a)		
	Fire hazards	30LA3 /4//01/11(a)		
	Shock and electrical hazards	SOLAS 74/78 II-1/45.1		
	 Personnel hazards (moving parts not protected, hot surfaces, etc.) Leaking fuel oil piping or fittings Sea chests, sea valves / spool pieces in good 	SOLAS 74/78 II-1/26		
	condition	001 40 74/70 11 0/45		
	 Tank tops and bilges free of oil Watertight doors Hand / power operation Local / remote control 	SOLAS 74/78 II-2/15 SOLAS 74/78 II-1/23		
	– Alarm			
Note	s:			

	Steering gear machinery	SOLAS 74/78 II-1/29
	LinkagesHydraulic leaksRam guidesLubrication	
\Diamond	Operationally test main and auxiliary steering gear	SOLAS 74/78 II-1/29.15 through 29.20
	 28-second operation Systems operate independently Unusual vibrations / leaks Ram hunting Limit switches Communications with bridge Steering gear instructions (block diagram) 	
\Diamond	Main ship service generators NOTE : Two independent sources of power require.	SOLAS 74/78 II-1/41
	F/O pipingCooling linesControls	
\Diamond	 Test operation of prime mover Personnel safety Ventilation adequate Electrical switchboard Grounds 	SOLAS 74/78 II-1/43
\Diamond	Bilge pumps • Two required	SOLAS 74/78 II-1/21
Note	9S:	

Section 4: Drills

Initial notifications	Familiarity with duties	Space isolation
General alarms / signals	Familiarity with equipment	Smoke control
Crew response	Fire pumps started	Communications w/ bridge
Properly dressed / equipped	Two jets of water	
Language understood by crew	Fire doors and dampers	
(SOLAS 74/78 III/18.3; MSM Vo	ol. II/22.C.7.i; NVIC 6-91)	
Location:		Time on Scene:
Notes:		
-		
		

Abandon Ship Drill: Familiarity with duties General alarms / signals Boat operation Muster lists Provide equipment Egress procedures Muster of crew Familiarity with equipment Davit-launched liferaft drill Crew response Lower lifeboat Communication w/ bridge Language understood by crew Brake operation Lighting Lifejackets Engine start (SOLAS 74/78 III/18.3; MSM Vol. II/22.C.7.h) Location: Time to Water: Notes:

Section 5: Expanded Examination Items

Manuals and Instructions:

0	Check for presence of the following documents				
	 Instructions for maintenance and operation of all installations / equipment for fighting and containing a fire 	SOLAS 74/78 II-2/20			
	 Training manual for lifesaving appliances Instructions for onboard maintenance of lifesaving appliances Stability booklet, associated stability plans and information 	SOLAS 74/78 III/18.2 SOLAS 74/78 III/51 SOLAS 74/78 III/19.3 SOLAS 74/78 III/52 SOLAS 74/78 II-1/22 ICLL 66 Reg. 10			
0	Cargo gear certificate				
0	Grain loading manual Bulk vessel (stability and grain manuals often combined)	SOLAS 74/78 VI/9.1			
\circ	Human Factors	STCW Code			

STCW Code

Determine if the appropriate crew members are able to understand the information given in manuals, instructions, etc., relevant to the safe condition of the ship and its equipment, and that they are aware of the requirements for maintenance, periodical testing, training, drills, and recording of logbook entries.

Safety Management System (SMS):

NOTE: Requirements and guidance for inspecting vessel Safety Management Systems are detailed in SOLAS 74/78, Chapter IX and NVIC 4-98.

- Documentation (may be in the form of a Safety Management Manual)
 - Controlled documents
 - Quality policy
 - Master of vessel familiar with SMS
 - Language understood by crew
 - Documentation identifies:
 - Written procedures kept on board vessel
 - Essential or critical equipment identified (or a separate manual containing this information)
 - Procedures for reporting non-conformities
 - Company's designated person(s) (name or title, and address)

Notes:			

O Company's training program conducted in accordance with STCW

STCW I/14

NOTE: Documented procedures established to ensure new personnel and personnel transferred to new assignments are given proper familiarization with their duties.

- Proper documentation
- Training conducted before crew is assigned shipboard duties
- Essential instructions are documented and provided before sailing

O Crew familiar with SMS issues

- Ship's officers
 - Documented procedures
 - Preventative procedures for essential equipment
 - Reporting requirements for non-conformities and able to identify typical scenarios that may result in a documented non-conformity
- Master and chief engineer familiar with internal audit procedures (e.g., know how many audits required per year and have participated in at least one) in addition to requirement's for ship's officers

O Documented maintenance system

- Documented in writing and computerized versions
- Readily available and in language understood by those who use them
- Procedures are followed
- Records maintained
- O Vessel-specific procedures are documented in writing and address the following areas: **NOTE:** Not mandatory that they follow the exact format listed below.
 - Preventative maintenance
 - Navigation
 - Bunkering operations
 - Emergency preparedness
 - Pollution prevention
 - Technical procedures
 - Communications

Notes:			

O	Audits	
	 Internal audits conducted as specified by SMS NOTE: Do NOT examine internal audit records. 	
	 External audit results reviewed Status of open non-conformities relevant to deficiencies leading to detention Status of implementation of corrective and preventative measure 	
0	SMS review conducted by Master in accordance with procedures in SMS	
	 Non-conformities identified Report of non-conformity prepared and sent in accordance with procedures established by SMS 	
Nav	rigation Safety:	
0	Test navigation equipment listed in Section 3 to the extent necessary to determine if equipment is operating properly.	
0	Human Factors (spot-check): determine if deck officers are familiar with the following items:	STCW Table A-II NVIC 3-98
Note	 Operation of bridge control and navigational equipment Use of nautical publications and charts Ship maneuvering characteristics Lifesaving signals Bridge procedures, instructions, manuals, etc. Changing steering from automatic to manual and vice versa Preparations for arrival and departure Communications with engineroom Use of VHF Raising the alarm Abandon ship drill and fire drill 	

0	Lights, shapes, and sound signals	72 COLREGS
	Navigation lightsSound signalsDistress signals	
0	Radio log	SOLAS 74/78 IV/17
0	Radio operation Transmit on 2182 MHz and Ch. 6, 13, 16, 70	SOLAS 74/78 IV/7
0	INMARSAT communications	SOLAS 74/78 IV/7.1.5
<u>Car</u>	go Operations:	
0	Human Factors: determine if personnel are familiar with the following items:	STCW Table A-II/III
	 Hazardous material regulations Special requirements (e.g., loading, segregation, firefighting equipment, etc.) for particular cargoes Dangers posed by the cargo Measures to be taken for cargo emergencies 	49 CFR 176.57
Life	esaving Equipment:	
0	Lifeboats/liferafts/rescue boats	
	 Ensure effective operation of winches, davits, falls, sheaves, etc. (Lower at least one lifeboat to the water.) Test lifeboat and rescue boat flemming gear and/or angions. 	SOLAS 74/78 III/19
	enginesVerify presence/condition of lifeboat equipment	SOLAS 74/78 III/41
	Retro-reflective tapeLighting	SOLAS 74/78 III/11.4
Note	9S:	
	29	

0	Emergency communication equipment	
	2-way VHF radiotelephone apparatusRadar transpondersSurvival craft EPIRBs	SOLAS 74/78 III/6.2
_	Onboard communication and alarm system	SOLAS 74/78 III/6.4
O	Line-throwing appliance	SOLAS 74/78 III/17.49
_	Specifications and equipment	
0	Pilot ladders and hoists in good condition	SOLAS 74/78 V/17
0	Distress signals	SOLAS 74/78 III/6.3
	12 red rocket parachute flares	
Fire	Protection:	
0	Structural fire protection	SOLAS 74/78 II-2/42, 43
	 Bulkheads and decks meet applicable fire integrity requirements 	44, 46, 47, 49, & 50
	 Openings (e.g., doors, ductwork, electrical wires, piping, etc.) constructed so that they do not destroy fire resistance of bulkheads 	
	Manual and automatic fire doors examined / tested	
0	Fire detection, fire alarm, and automatic sprinkler systems fitted where required and operating properly	SOLAS 74/78 II-2/52
0	Ventilation systems	SOLAS 74/78 II-2/48
	Main inlets and outlets of all ventilation spaces can be closed from outside ventilated space	
	 Power ventilation capable of being shutdown from outside ventilated space 	
0	Fire pumps	SOLAS 74/78 II-2/4
	 Fire main activated; water pressure satisfactory (energize forward-most and highest hydrants) 	
Vote	es:	
1016	···	

0	Paint lockers and flammable liquid lockers protected by an appropriate fire extinguishing arrangement	SOLAS 74/78 II-2/18.7
0	Special arrangements in machinery spaces Machinery space ventilating fans can be shut down from outside spaces All openings capable of being closed from outside machinery spaces Machinery driving forced / induced draft fans, oil fuel transfer pumps, and other fuel pumps fitted with remote shutdowns located outside space concerned	SOLAS 74/78 II-2/11
O	Firemen's outfits (spot-check) Two lockers Four outfits Protective clothing Helmet, boots, and gloves Lamp Axe Breathing apparatus and lifeline	SOLAS 74/78 II-2/17.3
Note	Test automatic stopping device required for discharge Segregation of oil fuel and water ballast systems Oily residue tank (discharge arrangements, homogenizers, incinerators, etc.) Witness operational test of emergency shutdown S:	MARPOL Ax. I/10 MARPOL Ax. I/14 MARPOL Ax. I/17 33 CFR 155.780
	31	

	•	Oil and oily mixtures Responsible officer familiar with handling of sludge and bilge water Quantity of residues generated Capacity of holding tanks Capacity of oil water separator Note any inadequacies in reception facilities used; advise master to report these to flag state	MARPOL Ax. I
Na	• • !	Garbage Note any inadequacies in reception facilities used; advise master to report these to flag state Crew familiar with Annex V requirements	MARPOL Ax. V
IVIA		ery Spaces:	
0		st communication between navigating dge and machinery space	SOLAS 74/78 II-1/37
	•	Two means, one of which must be an engine order telegraph	
0	Em	ergency source of electrical power	SOLAS 74/78 II-1/43
	•	Location Generator and/or batteries tested under load Emergency lighting	SOLAS 74/78 II-1/44
0	Ma	in engine / vital auxiliaries (spot-check) F/O pumps / piping S/W pumps / piping J/W pumps / piping L/O pumps / piping Piston cooling pumps / piping Air compressors / receivers Fuel / oil purifiers H/O heaters / transfer pump	SOLAS 74/78 II-1/27
Note	es: _		
		22	

STCW Table A-III

Human Factors

Low hydraulic oil Loss of power Loss of phrase Overload Human Factors: determine if personnel are STCW Table A-III familiar with the operation of the following items Emergency generator: Actions necessary before engine can be Different methods by which generator may be Stand-by generator engine: Methods to start engine automatically or manually Blackout procedures Load-sharing system Steering gear: Action needed to bring main and auxiliary into Changing steering from automatic to manual and vice versa Bilge pumps: Starting procedures for main and emergency bilge pump Appropriate valves to operate Fire pumps: Starting procedures for main and emergency fire pumps Appropriate valves to operate

SOLAS 74/78 II-1/29

Steering gear alarms

Notes:

Inert Gas Systems (IGS):

NOTE: Requirements and guidance on inert gas systems is detailed in 46 CFR 32.53, SOLAS 74/78 II-2/62, and MSM Volume II, Chapter 15.

O Type of system installed

Flue gas

Gas generator

Nitrogen bottles

O Sampling / testing of gas pad

Tank Number	% Oxygen	OR	% Nitrogen
		i	
	1		

Vessel is gas-free or not carrying cargoes required to be inerted

O Proper operation of IGS components

- Blowers
 - Free from excessive bearing noise and vibration
 - Remote shutdown for IGS blower
- Scrubber room ventilation
- Primary and alternate saltwater scrubber pumps
- Deck seal
 - Water level
 - Automatic filling
 - Open drain cocks on IG main
- Remote operated / automatic control valves
 - Open or closed indicator
- Gauges
 - Calibration of inline O₂ analyzing equipment
 - Check O₂ and pressure level recordings
- Portable instruments calibrated
- IG generator
 - Combustion control system and fuel supply
 - Interlocking of soot blowers (IGS automatically shuts down when soot blowers engaged)

Notes:				

O Proper operation of IGS audible and visual alarms

- High O₂ content of gas in IGS main
 - Activated at 8% concentration
- Low gas pressure in IGS main downstream of all non-return devices
 - Activated at 100mm (4 inches) water
- High gas pressure in IGS main downstream of all non-return devices
 - Blowers automatically shut down
 - Gas-regulating valves close
- Low / high water level or low flow to deck seal
 - Blowers automatically shut down
- Blowers discharge high temperature
 - Alarms activated at 150°F (65.6°C) or lower
 - Blowers automatically shut down
 - Gas-regulating valves close
- Failure of IGS blowers
 - Gas-regulating valves close
- Low water pressure or flow to flue gas scrubber
 - Blowers automatically shut down
 - Gas-regulating valves close
- High water level in flue gas scrubber
 - Blowers automatically shut down
 - Gas-regulating valves close
- Failure of power supply to automatic control system for gas-regulation valve and indicating devices for IG supply
- IG generator
 - Insufficient fuel supply
 - Failure of power supply to generator or control system for generator

Notes:			
			-

Ventilation:

O Proper machinery for cargo carried

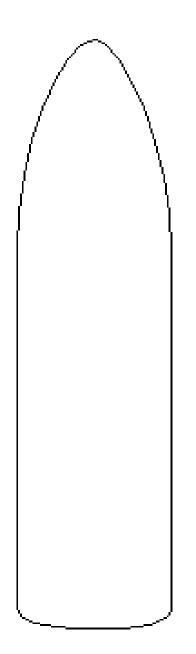
46 CFR 32.55-20

IF vessel carries:	THEN it must have:
Grades A-E liquid cargoes	 P/V valves Flame screens Corrosion-free properties Proper valve material Proper vent header height above deck Proper vent header distance from nearest living / work spaces, ventilation inlet, or source of ignition
Grades B - E liquid cargoes	Cargo tanks fitted with individual P/V valves or vent header
Grades D - E liquid cargoes	Goosenecks Flame screens

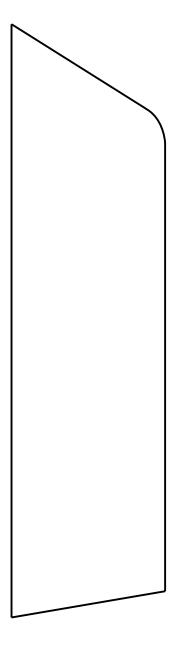
Notes:				

Section 6: Appendices

Vessel Layout:



- Double hull / bottom / sides
- Ballast tanks (SBT/CBT)
- Tank arrangement
- Deckhouse location
- External / internal framing
- Layout of pumps type



Cargoes Requiring a Response Plan:

Type of Cargo	Name of Cargo					
Asphalt Solution	Blending stocks	Roofers stock	Straight run residue			
Animal Oils	TallowLardStearic acid	Olive acidSperm oil	Fish oilFish liver			
Distillates	Flashed feed stocks	Straight run				
Easenal Oils	• Pinene	• Turpentine	• Dipentine			
Edible Oils	CornCoconut	SoybeanOlive	Cotton seed			
Gasolines	AutomotiveAviationCasinghead	PolymerStraight runGas, oil cracked	AkylatesReformates			
Naptha	AromaticCracking fractionHeavy	ParaffinicPetroleumSolvent	Stoddard solventVarnish makers			
Oils	 Clarified oil Crude oil Fuel oils [# 1 (Kerosene), # 2, # 2D, # 4, # 5, # 6] Residual fuel oil Transformer oil Lube oil and blending stock 	 Turbine oil Aromatic oil (excluding vegetable oil) Mineral oil Motor oil Penetrating oil Spindle oil Octene 	 Olefin Animal Range Residual Resin Road White (mineral) 			

Recommended ACP Vessel Deficiency Procedures:							
Step		Action					
1	Id	entify de	eficiency.				
2	Int	form ve	ssel representative.				
3	Re	ecord or	the Deficiency Summary Worksheet (next page).				
4	If deficiency is corrected prior to end of exam, go to Step 7.						
5	If deficiency is unable to be corrected prior to end of exam, follow guidance in the tables below.						
	TABLE 1: Minor deficiency discovered by Coast Guard marine inspector*						
		Step	Action				
		1	Notify ACP class surveyor-in-charge.				

1	Notify ACP class surveyor-in-charge.
2	If ACP class surveyor issues an OSR, go to Step 7.
3	If ACP class surveyor is not available, issue CG-835 to vessel with copy sent to ACP class surveyor-incharge. Go to Step 6.

TABLE 2: Major deficiency that poses a direct and immediate threat to vessel's crew, safety of navigation, or marine environment*

Step	Action			
1	Notify ACP class surveyor-in-charge of deficiency.			
2	Ascertain proposed corrective action.			
3	Detain vessel if so determined by OCMI under SOLAS I/19 or MARPOL Article 5.			

^{*} **NOTE:** Deficiencies shall indicate the item must be completed to the satisfaction of either the OCMI or ACP class society. The OCMI may deny or revoke the COI for noncompliance with the terms and/or conditions of the deficiencies.

- 6 Enter CG-835 data in MIDR.
- 7 Enter deficiency data in MSDS.
- Initiate Report of Violation (ROV) if necessary.

Deficiency Summary Worksheet:

Name of Vessel	VIN				
Deficiency	MSIS Code	Req't. Issued / Date Completed			

Deficiencies identified should be listed with MSIS codes. At completion of inspection/examination, any outstanding deficiencies shall be entered in MIDR or PSDR as appropriate. All deficiencies found (outstanding and completed) shall be entered in the Deficiency Summary. Worklist items, which serve only as memory joggers to complete inspection/examination (e.g., test emergency fire pump), should not be coded as deficiencies.

MSIS Codes for Deficiencies:

BS	Ballast	DC	Dry Cargo	IC	I/C Engine
ВІ	Bilge	ES	Electrical	LS	Lifesaving
ВА	Boiler, Aux.	FF	Firefighting	МІ	Miscellaneous
ВМ	Boiler, Main	FL	Fuel	NS	Navigation
cs	Cargo	GS	General Safety	PP	Propulsion
DM	Deck Machinery	НА	Habitation	SS	Steering
DL	Doc., Lics., Pmts.	HU	Hull		,

Notes:	

Notes:		
,		
-		

Notes:	
-	

Conversions:

Distan	ce a	nd En	ergy								
Kilowatts	s (kW)	Х	· · · · · · · · · · · · · · · · · · ·	1.34	1	=	Hor	sepower	(hp)	
Feet (ft)			Х		3.28	1	=	Met	ers (m)		
Long To	n (LT)	X		.9842	:1	=	Met	ric Ton (t)	
Liquid	(NC	DTE : Va	lues are a _l	oproxim	ate.)						
Liquid	d		bbl/	LT		m³/t		bb	l/m³		bbl/t
Freshwa	ter		6.4	10		1.00		6.	29		6.29
Saltwate	er		6.2	24		.975		6.	13		5.98
Heavy O	il		6.7	77		1.06		6.	66		7.06
DFM			6.6	60		1.19		7.	48		8.91
Lube Oil			7.6	66		1.20		7.	54		9.05
Weigh	t										
1 Long T	on	= 2	240 lbs			1 Metric	Ton	=	2204 lb:	S	
1 Short 7	Γon	= 2	000 lbs			1 Cubic	Foot	=	7.48 ga	I	
1 Barrel	(oil)	= 5	.61 ft = 42 .29 m ³	gal =		1 psi		=	.06895 of water		2.3106 ft
Temperature : Fahrenheit = Celsius (°F = 9/5 °C + 32 and °C = 5/9 (°F - 32))											
0	=	-17.8		80	=	26.7			200	=	93.3
32	=	0		90	=	32.2			250	=	121.1
40	=	4.4		100	=	37.8			300	=	148.9
50	=	10.0		110	=	43.3			400	=	204.4
60	=	15.6		120	=	48.9			500	=	260
70	=	21.1		150	=	65.6			1000	=	537.8
Pressure: Bars = Pounds per square inch											
1 Bar	=	14.5 p	osi	5 Bars	=	72.5 p	osi		9 Bars	=	130.5 psi
2 bars	=	29.0 p	osi	6 Bars	=	87.0 p	osi		10 Bars	=	145.0 psi
3 Bars	=	43.5 p	osi	7 Bars	=	101.5	psi				
4 Bars	=	58.0 p	osi	8 Bars	=	116.0	psi				